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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/436,440 11/09/99 SANDERSON

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EXAMINER

IM22/0809

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ART UNIT

PAPER NUMBER

1711

DATE MAILED:

08/09/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

Office Action Summary

Application No.

09/436,440

Applicant(s)

Sanderson et al.

Examiner

Rabon Sergeant

Group Art Unit

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☒ Responsive to communication(s) filed on Apr 30, 2001

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-11 and 31-41 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-11 and 31-41 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-11 and 31-41 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of copending Application No. 09/436,360. Although the conflicting claims are not identical, they are not patentably distinct from each other because each set of claims is drawn to polyisocyanate based elastomers derived from equivalent reactants. Despite applicants' response, the term, "difunctional oligomer", is fully encompassed by the difunctional compound of the copending application. It is not seen that any clear patentable distinction exists between the linking compounds of the respective sets of claims

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

3. Claims 1-11 and 31-41 are directed to an invention not patentably distinct from claims 1-13 of commonly assigned 09/436,360. Specifically, each set of claims is drawn to elastomers derived from equivalent reactants.

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4. Commonly assigned 09/436,360, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee is required under 37 CFR 1.78© and 35 U.S.C. 132 to either show that the conflicting inventions were commonly owned at the time the invention in this application was made or to name the prior inventor of the conflicting subject matter. Failure to comply with this requirement will result in a holding of abandonment of the application.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g).

5. Claims 31-41 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for elastomers wherein the A blocks are crystalline below about 60°C and the B blocks are amorphous above about - 20°C, does not reasonably provide enablement for elastomers wherein the A blocks and B blocks may be crystalline or amorphous, respectively, at any temperature. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

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Applicants have provided enablement only for elastomers which meet the aforementioned crystalline or amorphous temperature requirements. The recitation of monomers that are used to produce the segments does not insure that the temperature properties will be realized.

6. Claims 34-41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Within claim 34, applicants have stated that the B blocks are derived from monomers; however, the glycidyl azide polymer and poly (glycidyl nitrate) specifies are not monomers.

7. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language, “below about 75⁰C”, “above about - 20⁰C”, and “below about 60⁰C”, renders the claims indefinite, because “about” encompasses values slightly above or below the recited values; therefore, it is unclear if the language is met by values of 75⁰ or higher, -20⁰ or lower, and 60⁰ or higher, respectively.

Despite applicants’ response, it cannot be determined what exact meaning or significance can be ascribed to “below” or “above”, in view of the use of “about”. Applicants’ response has not clarified the issue.

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8. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear if the A block containing segment and B block containing segment are mutually exclusive, since both segments may be crystalline below -20°C and amorphous above 60°C . Under the aforementioned conditions, the requirements of both segments would be met by a single constituent.

Despite applicants' argument, there are no requirements within the claims stating that the crystalline temperature is not below -20° for A and that the amorphous temperature is not above 60°C for block B. Since this appears to be what applicants are arguing at page 8 of the response, the position is taken that the response is not commensurate in scope with the claims.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was

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made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Rad 5/15/02
10. Claims 1-11 and 31-⁴¹~~34~~ are rejected under 35 U.S.C. 103(a) as being unpatentable over Wardle ('613) in view of Oertel (Polyurethane Handbook: Chemistry - Raw Materials - Processing - Applications - Properties) .

Wardle discloses the production of thermoplastic polyurethanes comprising A and B blocks, which correspond to those of applicants, wherein the blocks are linked by reaction of diisocyanates, such as 2,4-toluene diisocyanate, and linking compounds having isocyanate reactive groups. See abstract and columns 4-9.

11. Patentee is silent regarding the use of an oligomer as the linking compound; however, patentee does disclose that there is no limitation on the size of the linking compound. Oertel discloses at page 86 that hydroxyl terminated urethanes are useful components for producing polyurethane synthetic rubbers, when used in combination with hindered polyisocyanates.

12. Therefore, the position is taken that one of ordinary skill in the art, in view of the Oertel teaching, would have found it obvious to utilize hydroxyl terminated urethane as the linking compound in combination with the hindered polyisocyanate and method of Wardle, so as to arrive at the instant invention.

13. The examiner has considered applicants' response; however, the position is taken that Oertel provides a generic teaching with respect to the use of hydroxyl terminated urethane with hindered polyisocyanates to yield synthetic polyurethane rubbers. This teaching when coupled

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with the teachings regarding the linking compound within Wardle is considered to render the use of a hydroxy terminated urethane as a linking agent *prima facie* obvious.

14. Claims 31 and 32 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Support has not been found for the subject matter of the claims. The disclosure at page 6, lines 23-25 refers to the polymer rather than the A blocks.

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication should be directed to R. Sergent at telephone number (703) 308-2982.


RABON SERGENT
PRIMARY EXAMINER

R. Sergent/dh

July 17, 2001